

Remarks

Claims 1-7 are now pending in this application. Applicants have amended claims 1 and 7 to clarify the claimed invention. Applicants respectfully request favorable reconsideration of this application.

The Examiner rejected claims 1-7 under 35 U.S.C. § 112, first paragraph, as not being supported by an enabling specification. In particular, the Examiner asserted that the specification does not enable revalidating the compiler for any errors introduced between the first and second compilation. Applicants have amended claim 1 to recite that the first and second software means are compared to find errors. This is clearly described in the specification, for example, at page 4, lines 15-27. Accordingly, Applicants submit that claims 1-7 comply with 35 U.S.C. § 112, first paragraph, and respectfully requests withdrawal of this rejection.

The Examiner rejected claims 1, 2, 6, and 7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 5,754,860 to McKeeman et al. in view of U.S. published patent application 2002/0046397 to Schmitt. The Examiner rejected claims 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over McKeeman et al. in view of Schmitt and further in view of U.S. published patent application 2003/0135842 to Frey et al. The Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over McKeeman et al. and Schmitt in view of Frey et al. and further in view of U.S. patent 6,598,074 to Moller et al.

The combination of McKeeman et al. and Schmitt does not suggest the invention recited

in claim 1 since, among other things, the combination does not suggest a user-written program that executes in a device with safety features for control of real world entities, wherein when the user-written program is enabled it is executed in the device. Along these lines, McKeeman et al. does not suggest utilizing one test program to revalidate a compiler by compiling the test program twice and comparing the results of the first compiling and second compiling. On the other hand, Schmitt suggests interacting with software of industrial controllers using graphical elements to permit a user to debug the program on a flowchart level. Schmitt does not suggest executing an enabled user-written program in a device with safety features as recited in claim 1. Safety features can, for example, include features to ensure that the system complies with safety standards, such as Safety Integrity Levels (SIL) as defined in the standard 61508. Schmitt does not suggest such safety features. The industrial controllers, in particular motion controllers, suggested by Schmitt neither explicitly nor implicitly suggest such safety features. Accordingly, combination of McKeeman et al. and Schmitt does not suggest the invention recited in claims 1, 2, 6, and 7 and Applicants respectfully request withdrawal of this rejection.

The combination of McKeeman et al., Schmitt and Frey et al. does not suggest the invention recited in claims 3 and 4 since, among other things, Frey et al. does not overcome the above-described deficiencies of McKeeman et al. and Schmitt. Along these lines, Frey et al. does not suggest a user-written program that executes in a device with safety features for control of real world entities, wherein when the user-written program is enabled it is executed in the device. The Examiner only cites Frey et al. as suggesting a check-sum or code for cyclic redundancy check. Such does not suggest a user-written program that executes in a device with safety features for control of real world entities, wherein when the user-written program is

enabled it is executed in the device. As a result, the combination of McKeeman et al., Schmitt and Frey et al. does not suggest the invention recited in claims 3 and 4 and Applicants respectfully request withdrawal of this rejection.

The combination of McKeeman et al., Schmitt, Frey et al. and Moller et al. does not suggest the present invention as recited in claim 5 since, among other things, Moller et al. does not overcome the above-described deficiencies of McKeeman et al., Schmitt, and Frey et al. Along these lines, Moller et al. does not suggest a user-written program that executes in a device with safety features for control of real world entities, wherein when the user-written program is enabled it is executed in the device. The Examiner only cites Moller et al. as suggesting downloading a variable that changes over time. Such does not suggest a user-written program that executes in a device with safety features for control of real world entities, wherein when the user-written program is enabled it is executed in the device. As a result, the combination of McKeeman et al., Schmitt, Frey et al. and Moller et al. does not suggest the invention recited in claim 5.

In view of the above, the references relied upon in the office action, whether considered along or in combination, do not suggest patentable features of the claimed invention. Therefore, the references relied upon in the office action, whether considered alone or in combination, do not make the claimed invention obvious. Accordingly, Applicants respectfully request withdrawal of the rejections based upon the cited references.

In conclusion, Applicants respectfully request favorable reconsideration of this case and

early issuance of the Notice of Allowance.

If an interview would advance the prosecution of this case, Applicants urge the Examiner to contact the undersigned at the telephone number listed below.

The undersigned authorizes the Commissioner to charge fee insufficiency and credit overpayment associated with this communication to Deposit Account No. 22-0261.

Respectfully submitted,

Date: December 22, 2008

/Eric J. Franklin/
Eric J. Franklin, Reg. No. 37,134
Attorney for Applicants
Venable LLP
575 7th Street, NW
Washington, DC 20004
Telephone: 202-344-4936